

# Energy Sleuths

## Project Learning Tree Activity #39

### Program of Studies

#### Science:

- S-4-ESS-3 (Earth's materials have different physical (e.g., capacity to retain water) and chemical (e.g., ability to support plants) properties and provide resources that humans use.)

#### English Language Arts:

- ELA-4-R-1 (Understand and respond to a variety of reading materials, making connections to students' lives, to real world issues, and/or to current events.)
- ELA-4-W-3 (Write transactive pieces (writing produced for authentic purposes and audiences beyond completing an assignment to demonstrate learning) based on personal experiences, reading, listening, observing, and/or inquiry.)
- ELA-5-W-3 (Write transactive pieces (writing produced for authentic purposes and audiences beyond completing an assignment to demonstrate learning) which develop ideas for authentic audiences and purposes.)
- ELA-6-R-1 (Identify meaning of a variety of reading materials, making connections to students' lives, to real world issues, and/or to current events.)
- ELA-6-W-3 (Use information from technology and other resources to produce writing that develops and supports independent ideas and contains source citations.)
- ELA-7-R-1 (Identify the meaning of a variety of reading materials, making connections to students' lives, to the real world, and/or to current events.)
- ELA-7-W-3 (Write transactive pieces (writing produced for authentic purposes and audiences beyond completing an assignment to demonstrate learning), based on inquiry and/or personal experience that show independent thinking and incorporate ideas and information from reading, listening, observing, and inquiry.)
- ELA-8-R-1 (Read and understand a variety of materials, making connections to students' lives, to real world issues, and/or to current events.)
- ELA-8-W-3 (Write transactive pieces (writing produced for authentic purposes and audiences beyond completing an assignment to demonstrate learning) that demonstrate independent thinking about literature, issues, and events relevant to students' lives.)

#### Social Studies:

- SS-4-E-2 (Understand that producers create goods and services and consumers make economic decisions and choices.)
- SS-6-E-2 (Explain the economic concepts (supply, demand, money as a form of exchange, goods, services, markets, competition, opportunity cost) as they apply in regard to individuals, societies, and governments.)

## Core Content

### Science:

- SC-E-2.1.2 (Earth materials provide many of the resources humans use. The varied materials have different physical and chemical properties, which make them useful in different ways, for example, as building materials (e.g., stone, clay, marble), as sources of fuel (e.g., petroleum, natural gas), or growing the plants we use as food.)
- SC-M-1.3.1 (Energy is a property of many substances and is associated with heat, light, electricity, and sound. Energy is transferred in many ways.)

### Practical Living:

- PL-E-3.1.5 (There are consumer decisions (e.g., reducing, recycling, and reusing) that have positive impacts on the environment.)
- PL-M-3.1.5 (Environmental issues (e.g., pollution) should be considered when making consumer decisions (e.g., recycling, reducing, reusing).)
- PL-M-3.3.2 (Improving environmental conditions (e.g., air and water quality) and preserving natural resources impact personal and community health.)

### Social Studies:

- SS-E-3.1.3 (Every time a choice is made, an opportunity cost is incurred. Opportunity cost refers to what is given up when an economic choice is made.)
- SS-M-3.1.2 (To make informed choices, consumers must analyze advertisements, consider personal finances, and examine the opportunity cost.)

### Reading:

- RD-E-2.0.10 (Connect the content of a passage to students' lives and/or real world issues.)
- RD-M-2.0.14 (Summarize information from a passage.)

### Writing:

- WR-E-1.4 (*Transactive writing* is informative/ persuasive writing that presents ideas and information for authentic audiences to accomplish realistic purposes like those students will encounter in their lives.)
- WR-M-1.4 (Transactive writing is informative/ persuasive writing that presents ideas and information for authentic audiences to accomplish realistic purposes like those students will encounter in their lives.)